

## PATENT ABSTRACTS OF JAPAN

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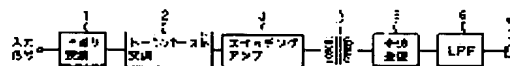
## (54) POWER AMPLIFIER

## (57)Abstract:

PROBLEM TO BE SOLVED: To provide a power amplifier which satisfies to cope with a high power, exclude a DC-DC converter, reduce heat generation and miniaturize a heat sink transformer all at the same time.

SOLUTION: A PWM modulation circuit 1 converts an input signal to a PWM signal of a square wave pulse train. A tone burst modulation circuit 2 outputs a sine wave signal having a frequency higher than the switching frequency of the PWM signal only when the inputted PWM pulse width modulation signal has a positive value.

This tone burst signal is inputted to a switching amplifier 3 and has the level amplified and is inputted to a transformer 4 and is boosted. The output of the transformer 4 is supplied to a full-wave rectification circuit 5 and an LPF 6 and is subjected to tone burst demodulation and PWM demodulation, and a signal obtained by amplifying the original input signal is outputted. Since the high frequency component is removed by tone burst modulation after PWM modulation of the original signal, the transformer 4 is miniaturized.



## LEGAL STATUS

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